

REMARKS

Claims 1-39 are currently pending. Independent claims 1, 19 , 37, 38, and 39 have been amended to make explicit what was already implicit – that determining relative levels of data content occurs *at a broadcast side* – in an effort to expedite prosecution. The amendments to these claims are not intended to narrow the claim scope insofar as it is believed that the broadcast-side limitation was already required by the claims.

Reconsideration is respectfully requested.

Request for Interview

Diligent efforts have been made to place this application in condition for allowance, including most recently a personal interview with the Examiner and further claim amendments presented herein. Should the Examiner believe that this Amendment does not place the application in condition for allowance, it is respectfully requested that the Examiner contact the undersigned for a further interview prior to issuing another Office Action, so that any remaining issues can be promptly resolved.

Statement of Substance of Interview of Interview of February 3, 2009

On February 3, 2009, Applicants' representative Douglas Pearson met with Examiner Thuong Nguyen to discuss the above-identified application. Specifically, Applicants' representative and the Examiner discussed the Office's suggested combination of Berstis, Voit and Linden set forth in the claim rejections of the Office Action of October 6, 2008. Applicants' representative reiterated that each of the instant independent claims require components or actions found or occurring at the *broadcast* side of an in-band on-channel (IBOC) *broadcast* system. Applicants' representative further reiterated that the Office's

primary reference, Berstis, which is relied upon in rejecting all of the independent claims, is directed to time shifting for an automotive radio *receiver* system and that even if combined, the applied references cannot yield the claimed invention for at least this reason. Applicants' representative further reiterated that there is nothing in Berstis or Linden to suggest transforming an automotive radio *receiver* system into some type of hypothetical mobile, vehicle-based, in-band on-channel (IBOC) radio broadcast *transmitter* system. Applicants' representative noted that one skilled in the art would not seek to modify an automotive receiver system of Berstis into mobile, vehicle-based IBOC radio broadcast transmitter system, since doing so would entail mounting commercial radio broadcast equipment to the automobile vehicle, such as a large radio broadcast tower and antenna, a large power supply, and a transmitter on the automobile, as well as obtaining a commercial FCC radio broadcast license. Clearly, one skilled in the art would not seek such a modification the automobile receiver of Berstis.

The Examiner indicated that she believed the claimed arbitrator limitation of claim 1 did not require actions occurring at a broadcast side and suggested that the arbitrator of claim 1 could read on a person himself operating the automobile receiver of Berstis. Applicants' representative disagreed, noting that claim 1 claimed a "digital broadcast scheduling system" comprising various elements, and contended that one skilled in the art would not interpret the claimed arbitrator (part of a "digital broadcast scheduling system") to read on a person. The Examiner indicated that an amendment to recite that the arbitrator determined relative levels of data content "at a broadcast side" would appear to overcome the Examiner's use of Berstis in the claim rejections insofar as the functions relied upon in Berstis relate to a user's interaction with an automobile receiver at a *receive* side. Independent claims 1, 19 , 37, 38, and 39 have been amended to recite that determining relative levels of data content occurs *at*

a broadcast side and to make clear that this limitation does not read on a person operating an automobile receiver, consistent with the Examiner's recommendation.

Art Rejections

The Office Action includes a rejection of claims 1, 5-11, 13-19, 23-29, and 31-39 under 35 U.S.C. § 103(a) as allegedly being obvious over U.S. Patent No. 6,944,430 (“Berstis”) in view of U.S. Patent Publication No. 2002/0044567 (“Voit”) and further in view of U.S. Patent Publication No. 2003/0009765 (“Linden”). The Office Action also includes a rejection of claim 2 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Berstis in view of Voit and Linden and further in view of U.S. Pat. No. 5,935,218 (“Beyda”). The Office Action also includes a rejection of claims 3-4 and 21-22 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Berstis in view of Linden and Beyda and further in view of Voit. The Office Action also includes a rejection of claim 20 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Berstis in view of Voit and Linden and further in view of Beyda. The Office Action also includes a rejection of claims 12 and 30 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Berstis in view of Voit and Linden and further in view of U.S. Pat. No. 6,782,510 (“Gross”). These rejections are respectfully traversed.

Even if hypothetically combined, the applied references would not yield the claimed invention

Even if hypothetically combined as suggested in the Office Action, the applied references would not yield the claimed invention. As noted above, each of the instant independent claims require components or actions found or occurring at the *broadcast* side of an in-band on-channel (IBOC) *broadcast* system. Independent claims 1, 19, 37, 38 and 39

have all been amended, consistent with the Examiner's suggestion, to explicitly recite

determining *at a broadcast side* relative levels of data content, as discussed above.

Moreover, claims 1 and 19 explicitly recite an *IBOC transmitter broadcasting* data content, and claims 37, 38, and 39 all explicitly recite communicating data content to an IBOC network for digital radio *broadcast transmission*.

In contrast, the Office's primary reference, Berstis, which is relied upon in rejecting all of the independent claims, is directed to time shifting for an automotive radio *receiver* system, and the functions relied upon in Berstis relate to a user's interaction with an automobile receiver at a *receive* side, including those described at col. 17, line 52 through col. 18, line 21 cited by the Office. Berstis discloses that a user may select a desired playback schedule and playback format for the automotive radio receiver system and may also select which broadcast programs are stored by the system, which broadcast frequencies are scanned, and how long each broadcast program is stored in memory. (*See, e.g.*, Berstis, Abstract, Title, col. 1, lines 10-12, claims 1, 10, 19-21.) Berstis describes "a system and method for implementing user specific preferences on the vehicle onboard computer system for regulating the operation of a *vehicle audio subsystem*" wherein the audio subsystem "would allow each operator to select preferred AM/FM radio stations, compact discs, or tape selections for listening." (Berstis, col. 1, lines 12-15 and col. 10, lines 8-9, emphasis added.).

Thus, for at least these reasons, Berstis cannot disclose determining *at a broadcast side* relative levels of data content, and Berstis cannot disclose sequencing said data content *for broadcast* based on the determinations of relative levels of data content, as required by the independent claims. The rejections must be withdrawn for at least these reasons.

Further, there is nothing in Linden or Voit to suggest transforming the activity occurring at the automotive radio *receiver* of Berstis to occur in an IBOC *transmitter*. As such, even if hypothetically combined as suggested by the Office, the applied references cannot not yield the claimed invention. The rejections against independent claims 1, 19, 37, 38 and 39 must be withdrawn for at least these reasons.

As noted in Applicant's prior response, determining relative levels of data content based upon priority indicators, service categories, and service classes of data content according to the present application provides a more flexible approach for scheduling content for broadcast transmission than is disclosed or suggested by the cited art. For example, as reflected in FIG. 3 of the present application, service classes (*e.g.*, basic, preferred, premium, etc.) and priority (*e.g.*, normal, urgent, emergency) provide substantial flexibility in scheduling content, and the addition of service category (*e.g.*, unknown/unspecified, administrative, maintenance, talent announcement, advertisement, news, sports, weather, traffic, emergency, alert, stocks, entertainment, restaurants, lodging, medical, health, hospitals, multimedia, audio, logo, text, etc.) significantly increases the information from which relative levels of data content can be determined and upon which scheduling decisions can be made. Such flexibility is not disclosed or suggested by the Office's combination of applied references. For at least these additional reasons, the rejections must be withdrawn.

Claims 2-4, 6, 7, 10-12, and 20-36 depend variously from claims 1 or 19, and are therefore allowable at least by virtue of dependency.

**One of skill in the art would not have combined Berstis, Voit and Linden
as suggested in the Office Action**

One of skill in the art would not have combined Berstis, Voit and Linden as suggested in the Office Action. As noted above, the claims at issue all relate to components or events found or occurring at the *broadcast* side of an in-band on-channel (IBOC) *broadcast* system. Berstis, in contrast, is directed to time shifting for an automotive radio *receiver* system. Linden, on the other hand, describes an on-demand radio broadcast system, including IBOC transmission, in which a communications channel is divided into a plurality of time segments of different priority and in which receivers have the capability to store received programs. It is respectfully submitted that there is nothing in Berstis or Linden to suggest transforming the automotive radio *receiver* system of Berstis into some type of hypothetical mobile, vehicle-based, in-band on-channel (IBOC) radio broadcast *transmitter* system.

Moreover, as noted above and as discussed during the interview, one skilled in the art would not seek to modify an automotive receiver system of Berstis into mobile, vehicle-based IBOC radio broadcast transmitter system, since doing so would entail mounting commercial radio broadcast equipment to the automobile vehicle, such as a large radio broadcast tower and antenna, a large power supply, and a transmitter on the automobile, as well as obtaining a commercial FCC radio broadcast license. The Office's suggested reason for it's combination (Office Action at p. 4) – to support broadcasting IBOC to dynamically alter the bandwidth allocated to a particular system channel – is facially flawed. As discussed above, one skilled in the art would not seek to transform an automobile receiver into an IBOC transmitter system. Withdrawal of the rejection and allowance of independent claims 1, 19, 37, 38 and 39, and dependent claims depending therefrom, are requested for at least these additional reasons.

Conclusion

In light of the remarks above, withdrawal of the rejections and allowance of this application are respectfully requested. Should there be any questions in connection with this application, the Examiner is invited to contact the undersigned at the number below.

The Commissioner is authorized to charge any fees that may be required by this submission to deposit account 50-3013.

Respectfully submitted,

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